

VCE Chemistry



Seymour
College

Chemistry – What is matter?

- What is everything made of?
- Why is water so amazing?
- What are atoms?
- What makes elements different from each other?
- How are chemical reactions important for everyday life?



Course Overview

Unit 1 – How can the diversity of materials be explained?

*Periodic table and trends, types of chemical bonding, the mole concept and **research investigation***

Unit 2 – What makes water such a unique chemical?

*Solutions, acids and bases, redox reactions, water analysis and **practical investigation***

Unit 3 – How can chemical processes be designed to optimize efficiency?

Fuels and combustion, galvanic cells, fuel cells and chemical equilibrium for industrial chemistry.

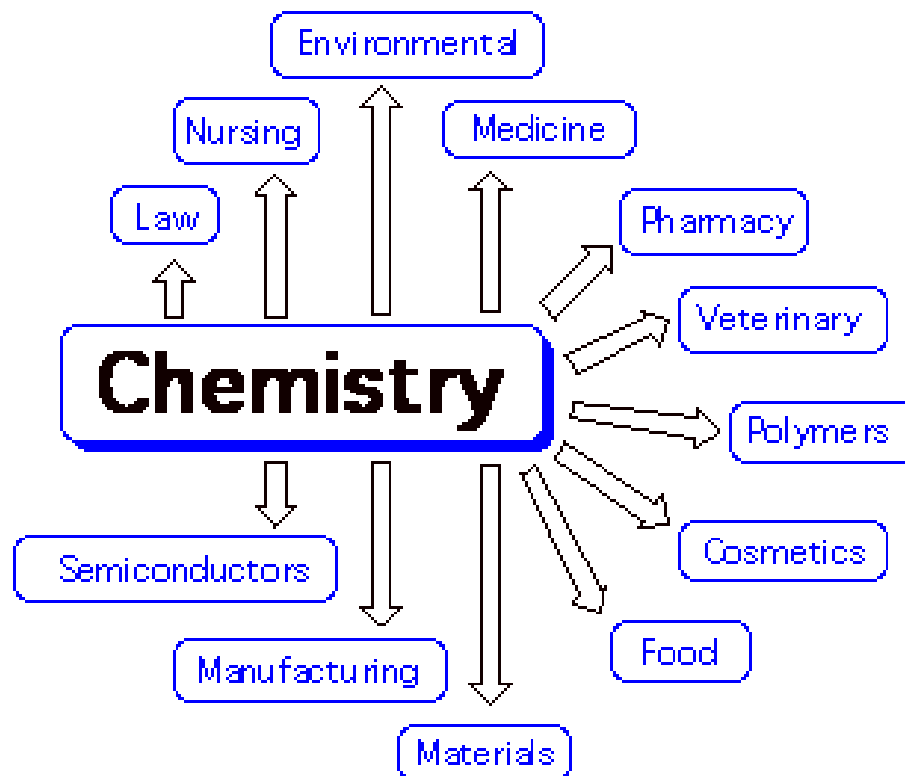
Unit 4 – How are organic compounds categorised, analysed and used?

*Organic Molecules, analysis of organic compounds, food chemistry + **practical investigation***



Pathways

- Environmental technology and green chemistry
- Research and academia
- Health and Veterinary Sciences
- Education (Chemistry)
- Engineering and manufacture
- Transport and aviation
- Food
- Pharmaceutical and Cosmetics
- Forensic Science
- Waste management and circular economy
- Materials (metals, polymers)



What to expect

- Chemistry is challenging and rewarding.
- To succeed in this subject you will need to:
 - Work hard and be organised for learning.
 - Have a good understanding of simple mathematics
 - Complete significant independent study.
 - Participate in class discussions & practical activities.
- Come and talk to Ms Gao for more information about this excellent field of Science!